

CLAIMS

What is claimed is:

1. A composition comprising an effective amount of *N*-terminally truncated galectin-3 and a pharmaceutically acceptable carrier.

2. The composition according to claim 1, wherein said *N*-terminally truncated galectin-3 has a sequence according to SEQ ID NO: 1 and analogues thereof.

3. The composition according to claim 1, wherein said *N*-terminally truncated galectin-3 is present in an amount sufficient to reduce tumor size.

4. The composition according to claim 1 for use in for treating cancer.

5. The composition according to claim 1, wherein said *N*-terminally truncated galectin-3 has a sequence as set forth in SEQ ID No:2 and analogues and homologues thereof.

6. The composition according to claim 5, wherein said analogues and homologues include at least one set of polypeptides that include amino acid sequences of SEQ ID No:2 beginning with an amino acid residue from Try-63 through Arg-129 and extends at least to an amino acid residue from Asp-241 through Ile-250.

7. The composition according to claim 1, wherein said composition in formulated for slow release.

8. A method of treating a tumor in a patient by administering to a patient in need of treatment an effective amount of *N*-terminally truncated galectin-3 according to claim 1, in a pharmaceutically acceptable carrier.

9. The method according to claim 8, wherein said administering step includes administering *N*-terminally truncated galectin-3 having a sequence as set forth in SEQ ID No:2 and analogues and homologues thereof.

10. The method according to claim 9, wherein said administering step includes administering analogues and homologues that include at least one set of

polypeptides that include amino acid sequences of SEQ ID No:2 beginning with an amino acid residue from Try-63 through Arg-129 and extends at least to an amino acid residue from Asp-241 through Ile-250.

11. A treatment for cancer and inflammation comprising an effective amount of *N*-terminally truncated galectin-3 according to claim 1, and a pharmaceutically acceptable carrier.

12. The treatment according to claim 11, wherein said *N*-terminally truncated galectin-3 wherein said *N*-terminally truncated galectin-3 has a sequence as set forth in SEQ ID No:2 and analogues and homologues thereof.

13. The treatment according to claim 12, wherein said analogues and homologues include at least one set of polypeptides that include amino acid sequences of SEQ ID No:2 beginning with an amino acid residue from Try-63 through Arg-129 and extends at least to an amino acid residue from Asp-241 through Ile-250.

14. The treatment according to claim 11, wherein said *N*-terminally truncated galectin-3 is present in an amount sufficient to prevent metastasis.

15. An anti-cancer treatment comprising an effective amount of a nucleic acid sequence encoding an *N*-terminally truncated galectin-3 according to claim 1, and a pharmaceutically acceptable carrier.

16. The treatment according to claim 13, wherein said nucleic acid sequence encoding the *N*-terminally truncated galectin-3 is present in an amount sufficient to prevent metastasis.

17. The treatment according to claim 11, wherein said treatment is formulated for slow release.

18. A nucleic acid sequence encoding for an *N*-terminally truncated galectin-3.

19. The nucleic acid sequence according to claim 18, wherein said *N*-terminally truncated galectin-3 wherein said *N*-terminally truncated galectin-3 has a sequence as set forth in SEQ ID No:2 and analogues and homologues thereof.

20. The nucleic acid sequences according to claim 19, wherein said analogues and homologues include at least one set of polypeptides that include

amino acid sequences of SEQ ID No:2 beginning with an amino acid residue from Try-63 through Arg-129 and extends at least to an amino acid residue from Asp-241 through Ile-250.

21. A method of treating a tumor in a patient by administering to a patient in need of treatment an effective amount of a nucleic acid sequence encoding an *N*-terminally truncated galectin-3 in a pharmaceutically acceptable carrier.

22. The method according to claim 21, wherein said administering step includes administering the *N*-terminally truncated galectin-3 in a method selected from the group consisting essentially of intramuscularly, orally, intravenously, and locally.

23. An antibody that specifically binds to carbohydrate ligands of galectin-3.

24. The antibody according to claim 23, wherein said antibody is used for treating cancer.